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TITLE : ANGIOTENSIN CONVERTING ENZYME INHIBITOR PEPTIDE

ABSTRACT : PURPOSE: To obtain the title peptide useful for a medicine, a healthy food, etc., effective for remedying and preventing hypertension, showing inhibitory action on angiotensin converting enzyme, comprising a peptide prepared by hydrolyzing milk serum protein with trypsin.

CONSTITUTION: Cheese whey powder is dissolved in distilled water, dialyzed in flowing water at 4°C for 2 days by using a dialyzing tube, low-molecular weight substances such as riboflavin and lactose are removed, the solution is adjusted to pH8.0 with 1N sodium hydroxide, mixed with calcium chloride so as to give 5mM final concentration, the prepared solution is warmly kept at 37°C, digested with trypsin for 12 hours while stirring, then the digested solution is adjusted to pH3.0 with hydrochloric acid, unreacted protein and trypsin are precipitated and removed, the solution is subjected to ultrafiltration to give a concentrated 1 solution, which is passed through reversed-phase high performance liquid chromatography and eluted with 0.01wt.% trifluoroacetic acid-methanol straight-line concentration gradient to give the objective peptide having inhibitory action on angiotensin converting enzyme.

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